

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILI	NG DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.		CONFIRMATION NO.	
10/621,728	07/17/2003		Pedro Lamartine de Faria		17945	1583		
26794	7590	05/07/2004				EXAMINER		
TYCO ELECTRONICS CORPORATION						FIGUEROA, FELIX O		
4550 NEW LINDEN HILL ROAD, SUITE 450 WILMINGTON, DE 19808					A	RT UNIT	PAPER NUMBER	
	•				2833			

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/621,728	DE FARIA ET AL.						
Office Action Summary	Examiner	Art Unit						
	Felix O. Figueroa	2833						
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with the	correspondence address						
A SHORTENED STATUTORY PERIOD FOR REITHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a lif NO period for reply is specified above, the maximum statutory perions for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be t reply within the statutory minimum of thirty (30) daiod will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDON	imely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on								
2a)☐ This action is FINAL . 2b)⊠ T	is action is non-final.							
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
 4) ☐ Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-26 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and 	drawn from consideration.	v.						
Application Papers								
9)⊠ The specification is objected to by the Exam	iner.							
10)⊠ The drawing(s) filed on 17 July 2003 is/are:	a) ☐ accepted or b) ☒ objected to	by the Examiner.						
Applicant may not request that any objection to t	- · ·							
Replacement drawing sheet(s) including the corn 11) The oath or declaration is objected to by the								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bur * See the attached detailed Office action for a light	ents have been received. ents have been received in Applica riority documents have been receiveau (PCT Rule 17.2(a)).	tion No ved in this National Stage						
Attachment(s)	_							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summar Paper No(s)/Mail [
 Notice of Dransperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date <u>02/05/04</u>. 		Patent Application (PTO-152)						

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure. The form and legal phraseology often used in patent claims, such as "comprising" and "said," should be avoided.

The disclosure is objected to because of the following informalities: In page 2 line 22, "130" should be --140--. In page 8, "an-a" should be --arm--.

Appropriate correction is required.

Drawings

The drawings are objected to because they have elements shown in cross section which are not properly crosshatched. Insulating members shown in cross section should be properly crosshatched. See Figures 4 and 7. It is brought to applicant's attention that the conventional crosshatch for insulating members shown in cross section consist of lines of two different thicknesses alternatively disposed.



Correction is required.

The drawings are objected to under 37 CFR 1.84(h)(1). When an exploded view is shown in a figure which is on the same sheet as another figure, the exploded view should be placed in brackets. See Figure 4.

The drawings are objected to under 37 CFR 1.83(a). Please note that while the specification describes the connectors 410 and 430 to be movable after the ridges 428 and 448 engage each other, the headers shown in Figure 4 do not appear that movable

Art Unit: 2833

after the ridges 428 and 448 are engaged. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 4, 10 and 18 are objected to because of the following informalities:

In claim 4 line 2, "the first ridge" and "the second ridge" lack antecedent basis. In line 3, "an-n" should be --arm--.

While claim 10 recites "a stop for preventing the retention arm from passing through the opening", it is noted that the present invention requires that at least part of the retention arm be passed through the opening, thus making the claim indefinite.

In claim 18 line5, "1 5" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7 and 10-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuoka (US 5,443,404).

Matsuoka discloses a connector assembly comprising: a first housing (2) having a retention arm (11); and a second housing (2) having an opening (9) for receiving the retention arm, wherein the retention arm is mounted in the opening and the first housing and the second housing are moveably connected.

Page 4

Regarding claim 2, Matsuoka discloses the first housing and the second housing being moveably connected in a longitudinal direction.

Regarding claim 3, Matsuoka discloses the first housing including a first rib (8a) proximate a terminating end of the retention arm, and the second housing including a second rib (8b) within the opening, wherein the first rib and the second rib engage one another to hold the retention arm in the opening.

Claims 1-6 and 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaley (US 4,580,861).

Kaley discloses a connector assembly comprising: a first housing (10) having a retention arm (14); and a second housing (10) having an opening (15) for receiving the retention arm, wherein the retention arm is mounted in the opening and the first housing and the second housing are moveably connected.

Regarding claim 2, Kaley shows the first housing and the second housing are moveably connected in a longitudinal direction (Fig.6).

Regarding claim 3, Kaley shows the first housing includes a first rib (at 27) proximate a terminating end of the retention arm, and the second housing includes a second rib (16) within the opening, wherein the first rib and the second rib engage one another to hold the retention arm in the opening.

Regarding claim 4, Kaley shows the retention arm can move longitudinally within the opening from a point where the first ridge and the second ridge engage to a point where the retention arm abuts an end of the opening.

Regarding claim 5, Kaley discloses the first housing and the second housing have an upper side.

Regarding claim 6, Kaley discloses the housings including contact pins (col.1, line 26).

Claims 1, 3, 5-9, 11-13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber et al. (US 4,790,763).

Weber discloses connector assembly comprising: a first housing (F) having a retention arm (26); and a second housing (E) having an opening (at 46) for receiving the retention arm, wherein the retention arm is mounted in the opening and the first housing and the second housing are moveably connected.

Regarding claim 3, Weber discloses the first housing including a first rib (at 34) proximate a terminating end of the retention arm, and the second housing including a second rib (at 50) within the opening, wherein the first rib and the second rib engage one another to hold the retention arm in the opening.

Regarding claim 7, Weber discloses the lower side of the housing including guide pins (12).

Regarding claim 8, Weber discloses the second housing further includes a guide (22,42) for aligning the first housing and the second housing.

Regarding claim 9, Weber discloses a guide (22) for aligning the first housing and the second housing.

Regarding claim 11, Weber discloses a plurality of retention arms and openings (see Fig.2).

Regarding claim 12, Weber discloses an adjustable pin header assembly comprising at least one first header (F) having an upper side for receiving periphery, a lower side having contact pins (70) extending therefrom in alignment with corresponding vias in a PCB, and a female connection mechanism (28), and at least one second header (E) having an upper side for receiving periphery, a lower side having contact pins extending therefrom in alignment with corresponding vias in the PCB, and a male connection mechanism (48), wherein the at least one second header is secured to the at least one first header by mounting the male connection mechanism in the female connection mechanism.

Regarding claims 13 and 17, Weber discloses the at least one first header and the at least one second header being moveable longitudinally with respect to one another. Please note that the headers can move with respect to each other when they are not connected to each other.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grabbe et al. (US 4,550,959), Okabe et al. (US 6,332,813), Rei et al. (US 5,295,870) and Sato (US 6,343,959) disclose connector housings that are connected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ffr

Jelis O. Ask

P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800